Norway maple

Acer platanoides

Fact Sheet

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Common Name: Norway maple New Hampshire Invasive Species Status: Prohibited (Agr 3800) Latin Name: *Acer platanoides*Native to: Europe and western Asia



<u>Description</u>: Large deciduous tree 60' high by 40' wide. <u>Bark</u>: Grayish and somewhat furrowed. <u>Twigs</u>: Smooth, olivebrown. <u>Buds</u>: Terminal, imbricate, rounded, smooth, greenish-red. <u>Leaves</u>: Opposite, 4-7'' wide, 5-lobed, dark green to dark red above, lustrous below. <u>Flowers</u>: Greenish-yellow, April. <u>Fruit</u>: Horizontal samara. <u>Zone</u>: 3-7. Habitat: Moist, well drained soils, full sun to partial shade. <u>Spread</u>: Seeds spread by wind and water. <u>Comments</u>: Leaf stalks exude milky white sap. Fast growing, buds break earlier than most native species. Naturalizes in woodlands where it can outcompete native species. <u>Controls</u>: Pull or dig seedlings/saplings. Cut large trees and prune suckers when they sprout. Herbicide: foliar spray, cut-stem, bark banding, or slash bark with ax and apply to wounds.

General Considerations

Within the past 30 years or so, Norway maple has spread widely in urban woodlots and forest edge habitats throughout the Northeast and providences of Canada. It prefers the same mesic (moist) soils where sugar maple (*Acer saccharum*) is often found. For this reason, Norway maple is recognized as invasive species in over 20 states in the Northeast and providences of Canada.

The ecological impacts, loss of natural habitat and reduction of species diversity, is a result of Norway maple's ability to create dense shade from its overlapping broad leaves/canopy. They also negatively affect the natural successional changes of forest habitat by the release of allelopathic chemicals from their shallow rooting system. These chemicals inhibit or prevent the establishment of other plants within the root-zone thus eliminating competition for water, nutrients, and light. These impacts to native vegetation are also amplified by its ability to uptake large amounts of water from the soil. The lack of adequate groundcovers can promote erosion and loss of soil, which has the potential to cause water quality and turbidity impacts to surface waters and wetlands. Furthermore, Norway maple has fewer diseases and pest insects that than our native sugar maple, which gives it a competitive edge over sugar maple.

Norway maple is sometimes confused with our native sugar maple (*Acer saccharum*) and so here are a few distinguishing characteristics that can be used to tell the two apart. Norway maple leaves are usually broader than they are long, while sugar maple leaves are generally longer than wide. Norway maple leaves when broken off at the petiole exude milky white sp where sugar maple has clear watery sap. Norway maple seeds (winged samaras) form in oppositely arranged pairs with a wide spread (180°); sugar maple seeds, and other native maple seeds, are horseshoe shaped where the wings droop at a 45° to 90° angle. Norway maple terminal buds are large, rounded, and blunt, with only 2–3 pairs of scales; sugar maple has long, sharply pointed buds with many scales. Bark of mature Norway maples has tight, furrowed grooves, similar to our native ash, while sugar maple bark is both flattish and smooth when young or platy when older. Norway maple leaves are very distinguishable in the fall since they persist after most native plants have dropped their leaves and because they turn a pale to orange- yellow, in contrast to sugar maple's brilliant oranges and reds.

Control Options

See the following control guides: <u>Integrated Pest Management (IPM) for Woody Plants</u>; or the <u>Control of Invasive</u> <u>Species by Numbers</u>

<i>Acer platanoides</i> Norway maple	
Plant Type	Tree
Habitat Type	Forests, field edges
USDA Hardiness Zone	3-7
Rooting Structure	Fibrous shallow
Environmental Impacts	Phytotoxin interrupts mycorrhizal activity. Foliage produces watersoluble antifungal chemicals which may alter the soil-borne mycorrhizae, pathogenic fungi, and decomposer fungi. Diminishes the quantity of light in
****1 11.6 *	the understory.
Wildlife Impacts	Loss of valuable habitat
Leaf arrangement	Alternate
NWI Ranking	UPL
Soil Type	
Soil pH Range	5.2-7.2
Light Requirements	Prefers partial to full sun, shade
Growing Season	
Growth Rate	1-ft per year
Mature Height	90 ft. (30 m)
Life Span	250 years
Reproductive Age	5 years
Flowering Period	April
Flower Type	Monoecious
Pollination	Insects
Seed Set	September
Seed Per Plant	>2,000 per plant
Scarification Required	Yes at 3°C
Cold Stratification	3-4 °C for 90-120 days
Seed Longevity	Typically 1-year, possibly 2
Seed Germination Rate	76%
Seedling Density	170-700/acre
Other Propagules	Suckering
Dispersal Vectors	Wind & water

Sources

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